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ABSTRACT

This report discusses the outcomes of a study that investigated the efficacy of a referential communication task for teaching written language skills to elementary school-aged children with learning disabilities. Participants included five dyads, each consisting of one child with a learning disability and one child with typical language development (ages 8-11). Children were to produce written instructions to enable the communication partner to complete a construction paper design. The children with learning disabilities and their communication partners were physically separated as they wrote instructions for the construction paper design. After completing the writing tasks, the children in each dyad exchanged papers and were given the pieces to complete the construction paper design. The children in each dyad then met to compare the completed design to the original model and gave their partners oral feedback as to the effectiveness of the written message. Results of the study indicate that as a result of the intervention, four of the five children with learning disabilities demonstrated an improvement in their overall writing scores from the pretest to the posttest, some children demonstrated use of visual organizers, and spelling errors decreased. (CR)

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EFFECT OF EXPLICIT AUDIENCE ON WRITTEN COMMUNICATION OF CHILDREN WITH LEARNING DISABIITIES

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ABSTRACT

Dyads, composed of a child with learning disabilities and a child with typical development, wrote and then exchanged instructions for art projects. The partners provided oral feedback to each other on the efficaciousness of the written messages. Posttest measures indicated positive changes in the content of the written messages.

INTRODUCTION

In the classroom, writing tasks are usually accomplished in response to a prompt provided by the teacher. While the children are given instructions to make their writing clear for their reader, the reader is generally not explicitly identified or immediately available for feedback (Graham, Harris, Mac Arthur, & Schwartz, 1991).

A referential communication paradigm has been used in the assessment and treatment of school-age children with spoken language problems (Bunce, 1991). In this paradigm, the child must convey a message to a listener so that the listener can identify a picture or object or follow a set of instructions. A screen is placed between the speaker and listener so that communication is restricted to a verbal only mode. Each participant takes a turn at assuming the listener and speaker roles.

The referential communication paradigm may prove useful in helping children with learning disabilities improve their written language skills. The paradigm provides an explicit audience, the "listener" or reader, and it allows for immediate feedback on the effectiveness of the writing process. If the written message is clear, the reader will accurately complete the described task. The paradigm also gives the writer an opportunity to receive immediate verbal feedback from the reader and instruction on how to improve the written product. At the same time, the writer has a turn as reader, providing input on the partner's written language effectiveness.

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PURPOSE

The purpose of this project was to investigate the efficacy of a referential communication task for teaching written language skills to elementary school-aged children with learning disabilities. In the classroom, the reader is generally not explicitly identified or immediately available for feedback during writing tasks (Graham et al., 1991). A referential communication paradigm may help children with learning disabilities improve their written language skills. The paradigm provides an explicit audience with immediate feedback on the effectiveness of the writing. If the written message is clear, the reader will accurately complete the described task.

PARTICIPANTS

- Five dyads each consisting of one child with learning disabilities (LD) and one child with typical language development from each child with LD's regular education classroom (10 children total).
- Four of the participants were enrolled in the third grade, and six were enrolled in the fourth grade. The children with LD received instruction in the language arts in a Learning Disabilities resource room.
- All the participants were monolingual for American English.
- All the children had normal hearing acuity.

Children with Learning Disabilities

- Mean age=10 years 2 months (Range 8:10 to 11:2).
- Full-scale intelligence scores on the WISC-III from 77 to 106 (Mean=92.6).
- No history of behavioral/emotional disorders.
- No history of attention deficit disorder/attention deficit hyperactivity disorder.
- No history of traumatic brain injury.
- History of writing difficulties by teacher report.

Communication Partners

- Matched by grade level.
- Mean age=10 years 2 months (Range 9:3 to 10:10)
- Average intelligence by teacher report and school records.
- Average classroom performance in reading and writing by teacher report.

PROCEDURE

The study consisted of a pretest and four training tasks followed by a posttest. The pretest was conducted five days before training was initiated. The training tasks were completed on four consecutive days. The posttest was conducted three days following completion of training. The tasks took 30 to 45 minutes

each. All tasks were completed in the LD resource room with the cooperation of the learning disabilities teacher.

The tasks were to produce written instructions so that the communication partner could complete a construction paper design. The designs were adapted from a commercially available writing activity resource manual (Wadle & Turk, 1992) or were designed by the first author. Each child was given another copy of the design. The designs given to each member of a dyad were similar but differed on several key elements.

The children with LD and their communication partners were physically separated as they wrote instructions for the construction paper designs. After completing the writing tasks, the children in each dyad exchanged papers. Each child was given the pieces to complete the construction paper design. The children read the written instructions and completed the design.

The children in each dyad then met to compare the completed designs to the original models. The members of each dyad gave their partner oral feedback as to the effectiveness of the written message. With verbal guidance from the investigator, the children told their partner what worked, what did not work, and what would have made the written instructions clearer. The investigator verbally reiterated the main points of the partner's feedback.

RESULTS

The pretest and posttest writing samples were scored for content using a rubric that gave 0 to 2 points for contrastive use of labels, use of position terms, and use of orientation terms. Scores were the proportions of points assigned out of a total of 38 possible points. The samples were also evaluated for errors in spelling, capitalization, and end of sentence punctuation. All the pretest and posttest writing samples were scored by the investigators in conference with each other. A third judge, a certified SLP trained in the scoring procedures, independently scored the samples. Pearson product moment reliability coefficients were calculated to determine interrater reliability between the investigators and the independent judge.

Interrater Reliability Coefficient

Overall writing score	.98
Spelling errors	.99
Capitalization errors	.95
Punctuation errors	.96

Overall writing scores were expressed as a proportion determined by dividing the number of points assigned by the judges divided by 38 possible points.

Overall Writing Scores

Subject	*Pretest*	*Posttest*
1	.29	.55
2	.32	.50
3	.58	.79
4	.21	.74
5	.61	.58

Scores for spelling were calculated by counting the number of errors divided by the number of words in the written sample. Scores for capitalization and punctuation were determined by dividing the number of errors by the number of opportunities. Only end of sentence punctuation was counted.

	Spelling* # errors/# words		Capitalization* # errors/# words		Punctuation* # errors/# words	
Subject	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest
1	.33	.32	.80	.43	.80	.86
2	.33	.31	.75	.33	.25	.33
3	.12	.06	.00	.00	.00	.125
4	.24	.18	1.0	1.0	.75	.29
5	.27	.24	1.0	.43	1.0	.14

** A decrease in the pretest to the posttest measure indicates a reduction in errors and improved performance.*

Paired samples *t*-tests were conducted to determine if the change in performance from pretest to posttest was statistically significantly different.

t-Tests for Pre and Posttest Measures of the Writing Samples of Children with LD

Measure	Pretest M	Pretest SD	Posttest M	Posttest SD	*df*	*t*
Overall score	.40	.18	.63	.13	4	2.56
Spelling errors	.26	.09	.22	.11	4	-3.50*
Capitalization errors	.71	.41	.44	.36	4	-2.35
Punctuation errors	.56	.42	.35	.30	4	-1.09

*$p<.05$

While the overall scores for 4 of the 5 children with LD numerically increased, the results of a paired samples *t*-test performed on overall writing scores for the pretest and posttest samples indicated that the scores were not statistically significantly different. Post hoc analysis revealed that this result was primarily due to the small sample size and the lack of change for subject 5.

There was a significant decrease from the pretest to the posttest error rates for the spelling scores. Punctuation and capitalization error rates showed no significant decrease from pretest to posttest measures.

DISCUSSION

While the small sample size makes it difficult to achieve statistical significance and to generalize the results to a larger population, several trends are evident from examination of the performance of individual participants:

- 4 of the 5 children with LD demonstrated an improvement in their overall writing scores from the pretest to the posttest. These scores reflected increases in the use of position terms that were necessary for the communication partner to place the items more accurately. A slight increase in specificity of label use was also noted.

- At the posttest, some of the children demonstrated use of visual organizers such as numbering each step. These were techniques the children had seen used by their communication partners.

- For the children with LD as a group, the spelling errors decreased from the pretest to the posttest. This may indicate more care with spelling so that the communication partner could accurately translate the directions.

- No significant improvement was observed in mechanical writing skills despite verbal feedback from the communication partners to use capitals and periods to mark sentences.

- While inconclusive, the results of this study suggest that a referential communication task may be a potentially efficacious treatment paradigm for improving the content of the writing of children with LD. Further investigation with a larger sample is warranted.

REFERENCES

Bunce, B.H. (1991). Referential communication skills: Guidelines for therapy. *Language, Speech, & Hearing Services in Schools,* 22, 296-301.

Graham, S., Harris, K.R., MacArthur, C.A., & Schwartz, S. (1991). Writing and writing instruction for students with learning disabilities: Review of a research program. *Learning Disabilities Quarterly,* 14, 89-114.

Wadle, S.L., & Turk, M. (1992). *The up down left and right of giving, writing and following directions.* DeKalb, IL: Janelle Publications.